Accommodations Toolkit

Scribe: Research

This fact sheet on **scribes** is part of the *Accommodations Toolkit* published by the National Center on Educational Outcomes (NCEO). It summarizes information and research findings on scribes as an accommodation. This toolkit also contains a summary of states' accessibility policies for scribes (/nceo/accommodations-toolkit/scribe-policies).

What are scribes? The term scribe refers to an accessibility feature or accommodation that allows for the use of a person to write or type a student's oral responses to test items. Sometimes the term "dictated response" is used, which refers to both the use of either scribes or speech-to-text technology to record students' oral or signed responses (Bolt, 2004).

What are the research findings on who should use this accommodation? Some students with disabilities may benefit from the use of a scribe. For students with learning disabilities, a scribe may decrease barriers for students who struggle with the mechanics of writing (e.g., spelling, grammar, punctuation, etc.). For students with physical or health impairments, the use of a scribe may increase their ability of to express themselves (Bolt, 2004; MacArthur & Cavalier, 2004). Students with learning disabilities, other health impairments, and significant cognitive disabilities are amongst the groups most frequently provided with this accommodation (Hall, 2002). As with most accommodations, the students who benefited most from using scribes when taking assessments had previously used them routinely during instruction (Bolt, 2004).

What are the research findings on implementation of scribes? Three studies were located that addressed the implementation of the use of scribes as an assessment accommodation.

- Two studies found that students with disabilities generally had improved performance when they used a scribe. Hall (2002) found that fifth grade students with disabilities tended to perform better than their peers without disabilities on a state summative assessment when they dictated responses to scribes, especially on science and social studies assessments. MacArthur and Cavalier (2004) found that essays dictated to a scribe by students with disabilities were generally higher quality than when no accommodation was used.
- One study (MacArthur & Cavalier, 2004) compared the use of scribes and speech recognition (speech-to-text) technology by students with and without disabilities to compose essays. A third group of students in the study received no accommodations. MacArthur and Cavalier found that students without disabilities showed no improvement with the use of dictated response, but students with learning disabilities produced better essays when using either a scribe or speech recognition technology compared to writing essays by hand.
- Researchers found that the effects of the scribe accommodation varied depending on what other accommodations were bundled with it. Bolt (2004) found that the scribe accommodation was effective when bundled with extended time and small group or individual settings. Hall (2002) found that use of the scribe accommodation, even when bundled with other accommodations, was less effective for students with emotional disturbance than for students with other disabilities.
- Hall (2002) found a racial/ethnic disparity in provision of the scribe accommodation on a state summative assessment. Hispanic students with disabilities were more likely to receive the scribe accommodation than students from other racial/ethnic groups (e.g., American Indian, African American, White, etc.).

What perceptions do students and teachers have about scribes? Five research studies touched on student and teacher perceptions about the use of scribes.

- Three studies suggested that educators may not understand when it is appropriate to use the scribe accommodation and may need additional training on how to use states' accessibility policies for making decisions (Bolt, 2004; Hawpe, 2013; Jordan, 2009).

- One study found that most general education teachers reported a "somewhat high" to "high' knowledge level about the scribe accommodation (Davis, 2011).
- Hawpe (2013) focused on teacher willingness to allow students to dictate responses during academic instruction and assessment. Hawpe found little to no difference between the attitudes of general and special education teachers about dictating responses to another person. However, in general, female teachers were more willing than male teachers to allow students to dictate responses. Similarly, middle school teachers were more likely than secondary teachers to allow dictation. Teachers with disabilities or who had family members with disabilities were no more or less willing than others to allow students to dictate responses to a scribe.
- In one experimental study, high school students with and without disabilities were asked to respond to assessment items three ways: handwriting, speech-to-text, and dictated to a scribe. Of the 31 student participants, 19 preferred speech recognition, five chose dictation to a scribe, and three chose handwriting.

What have we learned overall? In general, research shows that students with disabilities who have difficulty with writing mechanics or the physical act of writing may benefit from the use of a scribe on both writing assessments and assessments of other content. Although high school students preferred speech recognition over dictation to a scribe or handwriting the response, for students with learning disabilities, essays dictated to a scribe were generally higher quality than essays dictated using speech recognition. The research suggests that educators sometimes seem uncertain about when the scribe accommodation should be used. Hall (2002) concluded that states need to develop clearer expectations and administration procedures for the use of accommodations such as scribe that require interactions between students and individuals who provide accommodations. The scribe accommodation may be more likely to be selected for students from some ethnic or racial groups; care should be used to help ensure that this accommodation is assigned based on student need.

There is a need for additional research on the use of scribes as an assessment accommodation. Much of the research on this accommodation was conducted more than a decade ago.

Footnotes

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Research on scribes summarized here is also available in NCEO's searchable *Accommodations for Students with Disabilities Bibliography* (https://nceo.info/Resources/bibliographies):(https://nceo.info/Resources/bibliographies (https://nceo.info/Resources/bibliographies)) and in NCEO syntheses of research from 1999 through 2018 (see summaries for: 1999–2001 (https://nceo.umn.edu/docs/OnlinePubs/TechReport34.pdf), 2002–2004 (https://nceo.umn.edu/docs/OnlinePubs/Tech45/Technical45.pdf), 2005–2006 (https://nceo.umn.edu/docs/OnlinePubs/Tech47/TechReport47.pdf), 2007–2008 (https://nceo.umn.edu/docs/OnlinePubs/Tech56/TechnicalReport56.pdf), 2009–2010 (https://nceo.umn.edu/docs/OnlinePubs/Tech65/TechnicalReport65.pdf), 2011–2012 (https://nceo.umn.edu/docs/OnlinePubs/Synthesis94/Synthesis94.pdf), 2013–2014 (https://nceo.umn.edu/docs/OnlinePubs/Report402/NCEOReport402.pdf), 2015–2016 (https://nceo.umn.edu/docs/OnlinePubs/NCEOReport412.pdf), 2017 (https://nceo.umn.edu/docs/OnlinePubs/NCEOReport418.pdf), 2018 (https://nceo.umn.edu/docs/OnlinePubs/NCEOReport423.pdf), 2019 (https://nceo.umn.edu/docs/OnlinePubs/NCEOReport433.pdf)). See the reports and online bibliography for additional information about the criteria used to identify studies included in this fact sheet.

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